

The Farmer's Advocate AND HOME MAGAZINE.

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DOMINION.

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Nature's Diary.

A. B. KLUGH, M. A.

A common plant which is now in bloom is the Marsh Marigold, (*Caltha palustris*). This species belongs to the Buttercup Family, and the showy, yellow parts of the flower which look like petals are in reality sepals. The pistils are from five to ten in number, and each of them develops into a many-seeded pod. The Marsh Marigold has a very wide range in Canada, being found from the Atlantic coast west to the Rockies, and as far north as Hudson's Bay. The leaves of this plant, gathered when they are young and tender, make a most excellent substitute for spinach.

The earliest butterflies are now on the wing, one of the commonest and handsomest being the Mourning Cloak. This species has a spread of about three inches, and the wings are rich brownish-purple with a wide yellow border, and a row of blue spots just inside this yellow band. This insect winters over the adult stage, hibernating in hollow trees and sheltered places. It has two broods in the season and the caterpillar feeds on the leaves of the willows, poplars and elms. Another very common butterfly which is to be seen at this time of year is the Small Tortoise-shell, a species with a spread of one and three-quarter inches. The inner part of the wings is brown, outside this area is an orange-brown band and the margins of the wings are bordered with very dark brown, while along the front border of the front wings are three blackish patches. The caterpillar of this species feeds on the nettle, and there are three broods in a year. Two other butterflies which are also common are the Question-mark and the Comma. They belong to the same genus and resemble one another quite closely. The Question-mark has a spread of two and a half inches, and the outline of its wings is as shown in our cut. The color is a bright orange-brown, with black and brownish markings. The Comma is similar in coloration, but has a spread of only two inches, has not quite as long "tails" to the hind wings, and has more sharply defined black border to the front wings. The names of both these species strike me as somewhat fanciful, as I have never been able to make out either a clearly defined "2" or "C" in their markings. The caterpillars of both species feed on the leaves of the elm, hop and nettle, and both are double-brooded.

A common little bird in gardens, orchards and fields is the Chipping Sparrow. This species may be recognized by its chestnut crown, plain gray breast, the black line through the eye, and the black bill. The song of the Chipping Sparrow is a high pitched trill. It is one of the most insectivorous of the sparrows, its diet, for the entire year, consisting of forty-two per cent. of insects and fifty-eight per cent. of vegetable matter. During the months it spends with us the percentage of

insect food eaten is decidedly higher. One of its favorite items of food is caterpillars, both as food for itself and for its young, while beetles, bugs, and plant-lice are also taken in large numbers. The vegetable food consists almost entirely of weed-seed.

Dr Clarence M. Weed, of the New Hampshire Agricultural Experiment Station, made very careful observations on the feeding of nestlings of this species. He found that in June the parents began to feed the young at fifty-seven minutes past three in the morning and continued feeding until ten minutes to eight in the



Marsh Marigold (*Caltha palustris*).

evening. During this long day's work the parents made two hundred trips to the nest, bringing either food or grit for the young. There were no long intervals between the parents visits to the nest, the longest being one of twenty-seven minutes. Most of the food brought consisted of caterpillars, the next most common kinds of insects being crickets and crane-flies.

From observations on another nest of young Chipping Sparrows it was estimated that 238 insects were consumed every day by the brood.

This species is one of the birds mentioned by E. H. Forbush as an efficient agent in the destruction of canker-worms and tent-caterpillars.



The Question Mark.

The Chipping Sparrow builds its nest in bushes and vines, making it of rootlets and fine grass, and lining it with horse-hair. The eggs are three to four in number, pale bluish-green, dotted and scrawled with dark brown.

In many localities the Chipping Sparrow is not as common about dwellings as it was before the introduction of the House Sparrow, as this injurious and quarrelsome pest has driven away the peaceful and beneficial Chippy.

THE HORSE.

Sore Shoulders—Causes and Cures.

A large percentage of "sore shoulders" is due to ill-fitting collars or carelessness, or both. If the collar fits properly, and the teamster is careful to keep both collar and shoulder clean, sore shoulders should not occur, especially in horses that are accustomed to work. We speak of "ill-fitting collars." This naturally suggests the question, "What constitutes a proper fit for a working horse?" In order that the fit may be perfect, each horse should be especially fitted by an expert collar-maker, as each horse's shoulder has its own peculiarities as regards conformation, at the same time, there is so much similarity in the conformation of shoulders that collars made according to a standard will give good service on most horses, provided they are the proper size. Most shoulders are prominent at the point and for a certain distance up the shoulder, then somewhat hollow for a certain distance farther up, after which they again become prominent, then pass inwards and upwards, each to meet its fellow just in front of the withers. As these points, in most horses, have a somewhat definite relation to each other, the collar-maker can make collars of different sizes, each showing a fullness or slackness to fit the depressions and prominences mentioned; hence a collar of the proper length and proper width should fit the shoulder. In some cases there are peculiarities in the conformation of a shoulder that necessitate a collar of a shape differing from the standard. In such cases a special collar should be made. A perfect-fitting collar should be of such a length that, when in position, the teamster can pass his fingers between the lower part of the neck and the rim of the collar. There are certain conditions,

when the horse is drawing, in which the neck expands slightly downwards, and the space mentioned is to allow for this expansion. In width the collar should fit perfectly without allowing any room for expansion. If the collar be too wide it will take a somewhat rolling motion when the horse draws, and this will surely cause trouble, especially in hot weather. If it be too long it will not fit the point of the shoulder properly; hence trouble will result. On the other hand, if the collar be either too short or too narrow it will pinch and cause soreness. Great care should be taken not to have the collar too narrow at the top, as it will pinch the top of the neck and cause trouble that is very hard to treat. The fit of the collar should not depend upon the tightness of the buckling of the hames. It should fit properly of itself, and the hames should be fitted to the collar and buckled moderately tight. The draft should be adjusted to just about the heaviest part of a standard collar. If too low it forces too much draft on the point of the shoulder, and if too high it draws down too much on the top of the neck. It is not possible to give a definite measurement from the bottom or top, at which the draft should be placed, as horses measure so differently.

Fitting the Collar.

The average harness-maker is not a collar-maker, many harness-makers do not attempt to make collars; they purchase the collars they sell. Collar-making is a trade of itself. At the same time any harness-maker should be able to tell when a collar fits, and most of them are, and are very careful in the matter. Harness-makers are often blamed in this respect when they should not be. This is especially the case when young horses, or those that, while, in good condition, having had a few months of partial or complete idleness, have been fitted with collars, and after a few days' or weeks' work, suffer from sore shoulders. In such cases the muscles of the shoulders are full and flabby from want of function. Collars are properly fitted, the horses are put to work; the muscles of the neck and shoulders become smaller, partly from pressure and in many cases also from loss of flesh, as most young horses, or older ones that are unaccustomed to work, fail in condition when put to regular and steady work; and in all cases the muscles become less bulky, though harder in consistence. As a consequence the collars no longer fit properly, and if their use be continued without alteration, soreness of some kind is almost sure to result. In such cases smaller collars should be provided, or the original ones supplied with sweat pads to fill the space made by the shrinking of the muscles.

Opinions differ as to the best material for facing collars. Some prefer cloth made especially for the purpose, others prefer leather. Some claim that pigskin gives better results than any other material, but it is somewhat hard to see where its special virtue is. Whatever is used should be regularly and thoroughly cleaned, and the horse's shoulders should also be brushed and cleaned frequently. And when a horse is standing (especially in hot weather) the collar should be lifted forward on the neck to allow the air to circulate on his shoulder. In such a case the collar should be carefully readjusted, and the mane lifted from under it before starting the horse. When the collar fits properly and reasonable care is taken sore shoulders should rarely be seen. The collars should be taken off the horses, at noon, to allow both shoulders and collars to become cool and dry, and the collars should be cleaned and the shoulders well rubbed and brushed before the horses are again harnessed. This applies especially in warm weather and where the horses have not been accustomed to steady work. Shoulder trouble occasionally occurs even in cases where apparently all possible preventive measures have been observed.

Scalding.

Shoulder troubles are of various kinds. The most common is what is usually called "scalding." There is little or no swelling, but the skin becomes wrinkled and dry, the hair falls out, and the parts soon become partially or wholly raw. In such cases an astringent, cooling, antiseptic dressing should be used. There is no better dressing for such cases than a lotion made of 1 oz. each of acetate of lead and sulphate of zinc in a pint of water. This should be freely applied several times daily. Of course, in all shoulder troubles a rest is advisable, as it is a very hard matter to cure a case when the cause is continued, and very hard to treat a case of this kind even when a proper fitting collar is used.

Abscesses.

In many cases, instead of scalding, we notice enlargements of different kinds. These are caused by the bruising of the muscles by the collar. In some cases the enlargements appear suddenly, are soft and fluctuating and not very sore. These are called *serous abscesses*, they contain a variable quantity of serum (a bloody looking fluid of about the consistence of water). They should be freely lanced at the lowest part to allow free escape of the serum, and then the cavities should be flushed out three times daily until healed, with an antiseptic as the lotion mentioned, or a 5-per-cent. solution of carbolic acid or one of the coal-tar antiseptics.

Purulent Abscess and Fibrous Tumor.

In other cases the enlargements appear more slowly, and the heat and soreness are well marked. The swelling is hard and unyielding and often of considerable size. Some of these soon become soft at a certain point, which indicates the presence of pus. This is called a *purulent abscess*. It should be freely lanced and treated the same as a serous abscess. In other cases they remain hard and sore, and it may be hard

to tell whether or a fibrous and probed is present. But if no pus growth only succulent dissection would stite which must treatment of course, the patient.

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March can were cold to close of the coldest day many year serious in t and Southe has gone, b Farm labor was never for it being and yet the extensive p reconciled is In spite of They are, o almost ever case of who substantial whole milk sense an env making, o whose stapl coining mon cheese-mak If they had to produce this year it was selling u

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